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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,670	10/23/2003	Shigeki Iwanami	12-020-CON	5902

23400 7590 12/01/2004

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EXAMINER

SOLAK, TIMOTHY P

ART UNIT	PAPER NUMBER
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3746

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,670

Applicant(s)

IWANAMI ET AL.

Examiner

Timothy P. Solak

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/23/03&02/03/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

The numerous drawing sheets have not been checked to the extent necessary to determine the presence of all possible errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the Figures.

Specification

The disclosure is objected to because of the following informalities:

- * The incorporation of a foreign application, including a priority document, (see the paragraph starting on page 1, line 2) is improper because additional information contained within the priority document may not be disclosed in the specification. All applicable information contained within the priority document must be contained within the disclosure.

To overcome this objection, applicants need to rephrase the paragraph starting on page 1, line 2, such that the foreign application is not incorporated.

Appropriate correction is required.

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: --Controlling a Dynamotor Driven Compressor--.

Claim Objections

Claims 35-42 are objected to because of the following informalities:

- * Recitation of "and/or", in Claim 35, lines 3 and 4; is not clear in context. It is unclear as to whether the elements following the term "and/or" are part of the claim's limitations or not.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 35-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Irie et al. (EP 1 045 144), in view of Kawamura (4,901,530). Irie et al., teach a composite compressor comprising: an input means 40 for receiving power from an external drive source 1, a dynamotor 70 for operating as a motor or generator (column 6, lines 50-55) and a compressor 10. Although Irie et al. teach most of the limitations of the claims, including an inherent control system and the dynamotor operating when the external drive is stopped (column 5, lines 12-18); they do not specifically disclose a control unit for controlling the speed of the compressor by supplying and removing power from the dynamotor. Kawamura, disclosing a control system for an electric machine, specifically teaches a fixed displacement (column 4, lines 1-17) compressor 10, an

external drive source 1, an input means 22, a dynamotor 5 and a duty factor (column 3, lines 1-15) control system 6. Kawamura further discloses supplying power to the dynamotor to speed up the compressor (column 4, lines 5-6) and removing power from the dynamotor during normal operation (column 5, lines 15-18; inherently slowing the compressor). Kawamura teaches controlling the speed of the compressor by supplying and removing power from the dynamotor advantageously charged a battery (column 3, lines 6-7) and increased the output pressure (column 4, lines 49-51). Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used the control unit taught by Kawamura, in the pump disclosed by Irie et al., to have advantageously charged a battery and/or increased the output pressure.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Hongo et al. (5,723,967) teach a compressor having a duty factor control unit.
- Kawamura (4,745,755) teaches a compressor driven by an external source and a dynamotor.
- Kawamura et al. (4,757, 686) teach a control system for a motor/generator.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy P. Solak whose telephone number is 571 272-4833. The examiner can normally be reached on Monday through Friday from 10am to 6pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571 272-4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Timothy P. Solak

Examiner

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November 26, 2004